PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Contexts and mechanisms that promote access to healthcare for populations experiencing homelessness: a realist review
AUTHORS	Siersbaek, Rikke; Ford, John; Burke, Sara; Ní Cheallaigh, Clíona; Thomas, Steve

VERSION 1 – REVIEW

REVIEWER	David Blane University of Glasgow, UK
REVIEW RETURNED	02-Sep-2020

GENERAL COMMENTS	Dear Authors, There is much to commend in this review, which aims to identify contexts and mechanisms that promote access to healthcare for populations experiencing homelessness. However, I believe there is room for improvement or clarification in both application of the methodology and presentation of findings. Background The background section is good and makes the case for the focus on health system factors that influence access to healthcare for homeless populations. There are two points that I think could be made clearer. First, it is worth remembering that realist review is a theory-driven approach to literature/evidence synthesis, with the aim of developing structurally coherent explanations of complex interventions/policies/programmes and testing these against empirical data. Overall, I feel the paper would be strengthened by more reference to and consideration of pre-existing formal/substantive theory in this area. Two frameworks – from the WHO (2007) and Aday and Andersen's work (1974) – are mentioned in the background section, but there have been significant theoretical advances in relation to understanding healthcare access (particularly for marginalised groups) since then. For instance, the mid-range sociological theory of 'candidacy' described by Dixon-Woods et al, and the more recent IMPACT (Innovative Models Promoting Access-to-Care Transformation) work - https://equityhealthj.biomedcentral.com/articles/10.1186/1475-9276-12-18 (though I note you cite this in the discussion) and https://research.monash.edu/en/publications/equity-of-access-to-primary-healthcare-for-vulnerable-populations. Andersen has also been involved in several developments of his access framework, such as this from 2004, which specifically looked at contextual factors influencing access for low-income populations: https://pubmed.ncbi.nlm.nih.gov/15224958/

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	Second, I feel you need to make the case for doing a review of reviews (plus grey literature). Systematic reviews of reviews are well established as a means of synthesising a broad base of literature, but it is uncommon for realist reviews to use systematic reviews as their main source of data, as this information has already been through a process of interpretation (by someone else and for a different purpose, not necessarily to do with developing and refining theory) and is one step away from the original data. If you explain the rationale for this approach, and reference previous realist reviews of reviews if possible, that would be helpful. Method As above, you state you will follow Pawson's five stages, starting with 1. Locating existing theories, but then you don't actually do that. There is a growing literature about how to search for theories (e.g. https://onlinelibrary.wiley.com/doi/full/10.1111/hir.12108), but it is still acceptable to search for studies (or reviews) and assess to what extent the data fit with your own initial programme theory, and refine that theory from there. However, you do not provide any information about your initial programme theory, or how it was influenced by your team's theoretical, conceptual, and practical understandings. I think this would be helpful, perhaps as a supplementary file. Similarly, examples of your approach to coding could be provided to help the reader follow the logic of your analysis. Ultimately, you want to answer the question (as you have framed it): How, why, for whom, in what circumstances and to what extent can healthcare systems improve access to healthcare for populations experiencing long-term homelessness? The 'for whom' question does not appear to have been addressed at all. As you know, populations experiencing homelessness are a heterogenous group – some services may be more acceptable to some people experiencing homelessness than others (e.g. single older white men versus young migrant families). The concepts of 'intersectionality' and 'multiple exclusions' may be worth exploring in this regard, at least in the discussion section. Results It was not clear to me how you derived the different contexts, mechanisms, and outcomes presented. This is often a murky area in realist reviews, particularly the differentiation between contexts and mechanisms, but I think you could make clearer the links between the stated mechanisms and the relevant outcomes. The common advice from experienced realist researchers (see the RAMESES jisc listserve for numerous examples) is to start with Outcomes and work backwards. This helps to keep your analysis rooted in the data that you have. In this paper, it is not clear that you have done that because we have not been provided with any examples of this data. Indeed, even the "data extraction template" provided as a supplementary file looks more like a summary of included reviews. Taking each of the CMOCs in turn, while they intuitively make sense, it would increase the reader's confidence that they are grounded in data by including more of the steps in between your search and your final CMOCs – this could be done as supplementary files, if you do not feel the word count allows inclusion in the main text. CMOC1 is labelled "resourcing", but this includes inadequate training and inadequate funding. You had previously stated that training would not be considered as part of the review, though it is

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	clearly a very important resource for practitioners to develop their knowledge, skills and attitudes to improve care for populations experiencing homelessness. Indeed, the description of this CMOC speaks more to the creation of a 'welcoming' or 'unwelcoming' environment (which may or may not be related to resourcing) … and the influence of that on help-seeking, which is the initial outcome that then becomes the context for the mechanism of 'desperation', which leads to a range of included outcomes (exacerbated need, costly care, poorer health outcomes). However, as I have outlined already, it is not clear to me where the evidence for these different outcomes comes from, and how we know they are related to 'desperation' as a result of unwelcoming services, and not to other factors. CMOC2 is labelled "funding stability" and relates to both the number of sources of funding and the length of funding cycles. The outcome here is 'hiring and retaining highly skilled and experienced staff' – or, more precisely, difficulties therein. Again, it would be helpful to see the data where this outcome came from. It would also be helpful for the authors to make explicit the link between this outcome and access to healthcare, if there is evidence, for instance, that high staff turnover affects continuity of care and therapeutic relationships. This could be expanded to a linked CMOC, as in CMOC1. CMOC3 is labelled as "fragmentation and goals" and includes contexts related to both the degree of health system fragmentation (how is this assessed?) and the scope of goals (again, how has this been assessed?). The outcome is "Care designed and delivered around explicit and implicit health system goals", but it is not clear to me what this means or how it was derived as an outcome. CMOC4 is "care organised around the person" and includes mechanisms of flexibility, personalisation, clarity, connectivity, transparency, and timeliness. The outcomes are "Meeting patient's specific needs", "navigable" (what does this mean as an outcome?) and "services responsible for accessibility". Again, it is not clear to me how these were derived as outcomes. Furthermore, with regard to recommendations that might flow from this CMOC, how might this translate into learning for a service that is aiming to improve access for homeless populations? As you state in the Background section, "contexts are the only modifiable part of the construct", so how would we modify "care organised around the person"? What would this practically look like? Both link workers and peer advocates are mentioned in this section, but do not feature in the CMOC. Were there any lessons from the included studies (or grey literature) about what approach to link workers or peer advocates was most helpful for promoting access to healthcare, was this the case for some homeless populations more than others, and if so why (perhaps because of the mechanisms you mention)? My sense is that you have all the data required but could do with making the links clearer. CMOC5 is the best example of a configuration where the outcomes are clear (and relatively easy to define and measure) and the links between the mechanisms (of non-stigmatising environment, respectful, empathetic attitudes) and the outcomes are most obvious. Again, however, I do not feel I have learned much about what sort of "culture and leadership" generates a non-stigmatising environment where staff have respectful and empathetic attitudes. Perhaps "Leadership that emphasises a culture of inclusivity" could be a clearer framing of this context. CMOC6 is labelled "Flexible healthcare delivery" and incorporates several aspects – from the structure and process of appointment

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	systems (walk-in, self-referral) to policies (allowing dogs) to approaches (trauma-informed). Presumably in the distillation of 59 CMOCs into 3, many of the original 59 would have fallen under this umbrella? It would be helpful to see this process illustrated. I actually quite like the Fig 9 presenting the overarching programme theory. It also highlights how you could perhaps revisit some of your configurations (e.g. CMOC3 could be divided into scope of goals and degree of fragmentation, with further detail and examples from the data provided for each). Similarly, if "Training and expertise" is included in the overarching programme theory it should arguably be included as a CMOC in its own, rather than under the more vague "Resources". Discussion No major issues with the discussion. Minor comments: 1) It would be interesting to check how many of the RAMESES reporting guidelines were met. Perhaps include this in a revision. 2) You could discuss the limitation of doing a review of reviews. 3) There are 8 sensible recommendations presented, but it could be made more obvious how these relate to the CMOCs. Perhaps the number of CMOCs should be expanded. For instance, training is mentioned in the recommendations, the conclusion, and the overarching PT, but is not one of the distinct CMOCs. Finally, please note that in the appendix there are 25 papers included, not 24. I hope you find this review helpful in suggesting ways to strengthen the manuscript.

REVIEWER	Dr Rebecca Hardwick University of Plymouth, United Kingdom
REVIEW RETURNED	08-Sep-2020

GENERAL COMMENTS	Thank you for the opportunity to review this paper. The author is to be congratulated for undertaking a comprehensive realist review which looks at an important and complex field of public health work. Developing understanding of how healthcare systems shape individual experiences of services for marginalised groups is an important area for research, and she has completed a useful piece of work with this article. I enjoyed reading this paper, and felt the author style of prose was clear. I have made quite a lot of comments because I think the paper is good, but needs a bit more refinement before publication. The title clearly reflects that this was a realist review. The abstract covers the necessary items in the RAMESES publication standards for realist synthesis. A combination of induction and deduction were used in analysis, and this needs reflecting on the abstract. The conclusion in the abstract would benefit from explaining more directly how the study informs policy making and implementation by giving a few examples. Article summary/ strengths and limitations could also include the limitations identified towards the end of the paper. Further limitations of using a 'realist review of reviews' could also be considered: realist reviews can find that there is insufficient information from primary sources about the 'nature of the intervention' (which helps with understanding mechanisms), and so I wonder to what extent a review of reviews suffers further with the included review articles not being explicit about the 'nature of the intervention' and what this might mean for the conclusions and implications?

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	Background section: I think the paragraph about supply and demand side factors needs a bit more analysis in terms of why this impacts on people who experience homelessness, or what the differential/increased negative impact this has on people who experience homelessness. Just needs a bit more to state why this is relevant to this study population. There is no definition of what is meant by 'health system', and I think the readers would benefit from understanding what that meant in the context of this study. Could consider the definition of 'system' in Ch1 of Byrne and Callaghan's 'Complexity Theory and the social sciences'? Similarly, complexity is not defined either, and this is important as it should also be part of justifying why a realist review (as opposed to a systematic review) was undertaken. Further, the sentence 'accessing healthcare is complex' does not quite go far enough in my opinion to explaining what is defined as complex in this study, and also why accessing healthcare is complex – the existence of many variables (line 23) would make it complicated: complexity is generally thought of as being to do with the non-linear interactions between variables or components of a system which leads to the emergence of properties above and beyond the sum of variables i.e. 2+2=5. Paragraph starting "The majority of research exploring access to healthcare…" is excellent – concise, clear and well argued. Only the final sentence might need adjusting – at the moment it reads as though the review is addressing access to services for all populations, as well as homeless populations – but the title and review objective locate the study as looking only at homeless populations, so need to be specific: what is the study population? The summary of realist methodology needs some further elaboration: although definitions are given in an annexe for contexts mechanisms and outcomes, they do need to be explained in this section for the lay reader to understand what they mean in a realist sense. There is also a need for further explanation as to why the review focussed on contexts which shape mechanism action, rather than on mechanisms and their conducive contexts – usually realist work aims to hypothesise generative mechanisms which bring about change, and then through examining a pattern of outcomes determine which outcomes support/inhibit mechanisms working as intended. In this review, it seems the focus is on contexts first, and what mechanisms they may be 'firing'. Initially, this different emphasis threw me, and I think it needs clearer justification in the paper. I also think that the choice of contexts needs further justification and explanation – if relevant contexts are what matter in realist explanation building, then how do we know that the these are relevant? If the review had sought to understand which mechanisms cause the outcome of 'access to healthcare' and then tracked back to look at relevant contexts that would make sense, but as the work starts with proposing contexts which are important, I think this needs further justification. Relevant contexts are what matter (not anything which might have an impact – see Pawson's note on this p185 in the paper A Realist Diagnostic workshop https://journals.sagepub.com/doi/abs/10.1177/1356389012440912). I think its important then for this study to emphasise mechanisms in this section too, with a description/definition of what realist generative mechanisms are. The author might also like to look at this debate on

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	RAMESES which happened a while back about contexts/mechanisms. https://www.jiscmail.ac.uk/cgi-bin/wa-jisc.exe?A2=ind1402&L=RAMESES&P=R9801 The question which arises is whether contexts or mechanisms are causal? See also comments on glossary of terms at the end of the review. Methods section: need to include a justification of why a realist review was undertaken – what is it about RR that makes it a suitable method? (see Item 6 on RAMESES guidelines about including rationale for realist review). The description of how the initial programme theory was developed could be expanded – see Item 7 on RAMESES guidelines - also need to include 'something' which helps us understand what the initial programme theory was – the IPT would have been used as a guide for searching (identifying keywords), inclusion and exclusion criteria, and data extraction and so it's important its included for trustworthiness of the findings. Searching – how was the initial programme theory used in the search? Inclusion/Exclusion criteria: the paper might benefit from being more explicit about these. Data extraction – how was initial programme theory used in the DE? I've made a separate note on the DE form which was included in the annexe. Data extraction and analysis: The terminology needs to be more consistent in this section: at the moment, there are inductive codes from the literature, headline categories, initial codes (which aren't explained), and it is a bit confusing to understand what happened with which studies and when. Also, I think there is a need for further clarification in the sentence p8, line 5/6 about how studies were inductively coded: what literature is being referred to here? Is it studies which were retrieved by the search, or from elsewhere? Also, if thematic headings drawn from the literature were used for coding is that inductive coding, or actually deductive coding? It might be that just needs a bit more clarification. This section also needs to include details of how the grey literature/expert references were used in the development of CMOCs. Results: Search results and study characteristics. For completeness, an account needs to be given of what happened to the grey literature in this first paragraph, and also references suggested by experts. The PRISMA diagram states that 47 articles were included in the review, but this paragraph only talks of the 24 peer reviewed articles. It would also be useful to have the summary table from the supplementary file of the included studies here in the paper for reference rather than in the supplementary file (if allowed!), and that table also needs to include the other studies that were included in the review, but which were grey literature/found through other means. (Also, the title of that table is a bit misleading: it doesn't look like a data extraction table, as there is no coding of data in it or reference to C,M or Os, and I am not sure if calling it 'initial search' is helpful, as that would imply to me the development of initial programme theory, rather than 'included studies' in the review). See also Item 13 in RAMESES guidelines. Programme theories and CMOCs.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	The paragraph which starts on p9, line 10 needs to tie in more explicitly with the previous parts of the paper which talk about number of included studies and grey literature – at the moment, it looks like this was a 'new' search, which I don't think it was – just need to clarify where the 'grey literature sources' came from – did they come from the original search, or were they purposively searched for after the original search was done? The author has done an excellent job of demonstrating how C,M and Os 'change places' depending on the part of the implementation chain being explored/focus of the analysis! I've separated commentary on the results into two sections: one on the text, and one section on the Figures. Results: Text Overall it would be great to include some examples from studies included in the review to illustrate each of the CMOCs. Further, the text reads like a summary, which is useful, however, I think each section could benefit from a bit deeper analysis/ more information and further nuance – did all studies find these things? Which studies didn't? Were there different outcomes of access resulting from different ways of organising services and how were these accounted for? There is a need too for more 'linking phrases' between sentences, such as 'when this happens, included studies showed that it led to …' to really emphasise how the explanations tie together. As expected, some of the CMOCs relate to other CMOCs – it would be good to highlight where this is the case, and to comment on what it means for the CMOCs. Funding stability and source: need to explain why it is that the outcome of difficulties hiring and retaining skilled and experienced staff is caused by staff experience of sustainability and stability. Do staff distrust the service? Are staff primarily motivated by financial stability? Were all staff across the included studies worried about funding? Etc. Or is it more systems, insofar as there is no money to hire staff? Also, point for reflection here, it's moving from a system context to an individual response to a system outcome. This is interesting and needs comment. Also, need to explain why hiring experienced staff matters – how might this relate to Resourcing CMO with regards to inadequate training? Health system fragmentation and goals: would be interested to know why staff prioritise meeting organisational goals above patient centred care? Also, this is another example of a system- individual response – system output. In terms of line 42, 'staff and providers are not incentivised or empowered…' this sounds like a different CMO, and so it needs to be tied in to the context more directly? It probably also relates to other CMOCs (talk of 'incentives', so maybe cross over with Resourcing CMOC?) and it would be great to tie it in with them where possible. Care organised around the person: this is the kind of depth of explanation which is needed for the other CMOCs if possible – it's very helpful and unpacks on a deeper level what is going on and why. Inclusive culture and leadership: need more detailed explanation of how culture assigns value – an example from an included study would be helpful here. Re: trust – it sounds like this is a positive feedback

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	loop? Were there any instances in the literature where despite trust being developed, this did not lead to ongoing engagement and access to healthcare? Do you think that Trust is a crucial mechanism for facilitating access to healthcare for homeless persons? If so, this is something that needs to be explored in more depth, with examples given. Were there any instances of despite negative culture, trust was developed? And do all staff conform to the organisational culture and leadership? In what circumstances do staff not conform? This also looks like another 'system-individual-system' CMOC – which is leading me to think that this needs commenting on in the discussion: i.e. that the study has determined how different system contexts impact accessing healthcare, but that in all/some of these, the mechanism is at the human/person to person level – so what might the implications be of that for improving access? (Pawson's paper on the dynamics of social change in complex organisations might be a useful reference to think through in relation to this: https://www.sciencedirect.com/science/article/pii/S0277953614003268) Flexible healthcare delivery: There is a tendency towards 'listing contexts' in this section which is unhelpful as it doesn't explain how these contexts influence the mechanisms – see earlier Pawson paper on Realist Diagnostic workshop. There's a need to provide a bit more detail as to how these contexts impact on the mechanisms – to be more explicit and use examples from the included studies and configure the CMO in the text. Or alternatively, select only the most relevant contexts from that list which impact on the most relevant mechanisms and explain those CMOCs. Where outcomes become mechanisms, some reference needs to be given to the contexts which then enable these new mechanisms to operate: are they the same contexts described earlier, or are there additional contexts which are needed? CMOC states that 'providers and staff with expertise…' (line36, p13). So how does this relate to the first CMOC on inadequate training/lack of expertise? Some cross referencing here between different programme theories would be useful in helping to adjudicate and further the analysis. (Minor point: can providers have expertise? They are not conscious entities, so I'd avoid anthropomorphising them.) There is no text describing Figure 9, which would be very valuable in bringing the whole thing together. Comment on the Figures and use of visual CMOCs It feels like the CMO Figures are leading the results section a bit too much and yet just cannot capture the complex, nuanced way that the study has learnt about healthcare system access. I wonder if it is truly necessary to keep all the CMO diagrams. If the authors feel it is essential, then I think it would be better to have the description followed by the figure – one can get lost trying to understand a figure if one hasn't been guided through it by the text beforehand. It would be good too if the terms used in the figure are also exactly the same as the terms used in the explanatory paragraph – makes it much easier to read between the diagram and the text e.g. "resourcing and incentives" is actually "inadequate funding assigned": this matters because the review only found studies which talked about inadequate funding, so it's not a neutral resourcing and incentives, but a negative

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	resourcing and incentives. (Plus, resourcing and incentives are broad contexts: all programmes have resourcing and incentives – what is it about the resourcing and incentives in these programmes that influences whether or not mechanisms fire? And the answer is it is inadequate funding which does this…specificity is important in drawing CMOCs.) A further point on words in the figures, these need to address the 'for whom' where it is relevant – so for instance in Figure 3, 'Attitude' needs to be assigned to staff, and 'desperation' needs to be assigned to homeless persons and so on. Spelling on Fig 3 – Challending – challenging. Fig 4 – needs further clarification: the M isn't quite there – what is it about instability that causes people to move on/not apply for jobs (which are two different outcomes). Fig 5 – is fragmentation the same as silos (in text)? Fig 6 – need to check against the text to make sure the words in the boxes are the ones in the text. Fig 7 – What are the contexts which enable trust to 'work' as a mechanism? Fig 8 If Needs identified becomes a new context, it needs to be repeated on the left hand side, as at the moment it is only showing as an outcome. Ditto patients feel seen and understood. Fig 9 overarching programme theory needs further specificity in terms of which are contexts, mechanisms and outcome and what is the nature of the contexts/mechanisms (some of the categories given are broad), and how do they relate to each other – i.e. what is their configuration? Also, the words used here are not the same as the words used in the preceding CMOCs which would strengthen the Figure. Discussion Statement of Principle Findings: I am not sure that saying mechanisms 'arise' (line 41) is the clearest way of describing this – mechanisms are not caused by context: we see the effects of their working in particular contexts, but they exist independently of context. (See earlier point and RAMESES discussion link, and comment on the supplementary file). A more accurate way of putting this would be something about mechanisms being activated in these contexts. Limitations: studies only include High Income Country healthcare systems, so what is the implication for transferability? To what extent do the contexts in LMI countries differ from those of HI countries, and how might this shape the implications? Also, impact of using reviews on trying to understand mechanisms (point raised earlier in this peer review). Comparisons with existing literature: need to include population group in first sentence to locate the study in the wider literature. "We are aware of no other realist reviews examining this topic in this population and of no other reviews of any approach that have examined high-level health system features that promote healthcare accessibility for homeless people."

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	Meaning of the study: the sentence “The first three CMOCs above (CMOC 1-3) were generated almost exclusively from grey literature sources and the next three (CMOC 4-6) were generated primarily from peer reviewed literature” does not seem congruent with the methods section. The following sentences need some adjusting: As in other realist works, our analysis has uncovered common mechanisms occurring in demi-regular patterns experienced in the specific contexts described in the literature. The mechanisms and outcomes do not always occur in a given context. (p15 lines 56-59) As this is the first mention of demi-regular patterns, I’m not sure it can be claimed that the analysis has uncovered them – also, I’m not sure if this is meant to be common mechanisms or common outcomes (outcomes are more usually associated with demi-regularities – I’ve not heard it applied to mechanisms before (which doesn’t mean to say it can’t be done!) In realist analysis, it is the demi-regular, patterned nature of outcomes leads us to consider what mechanisms in which contexts are causing them. Secondly, I was a bit confused by the sentence that The mechanisms and outcomes do not always occur in a given context. I think this sentence needs a bit more clarification, e.g. is it meant to explain that the review didn’t identify all the different mechanisms and outcomes which the contexts that you explored might be triggering? Glossary of terms Having read the glossary of terms, I am not sure that they are quite right yet – I’ve offered some thoughts in italics to consider, in any case, it would be helpful to include references here as to where the definition is drawn from. Context: environments, settings, circumstances or structures that trigger mechanisms (behaviours, emotional responses) in individuals. Context is anything which influences the action of a mechanism: some contexts stop mechanisms. Context-mechanism-outcome configuration (CMOC): configuration that explains the causative relationship between a given context which causes a mechanism to be triggered to produce and outcome. This sounds like contexts cause mechanisms to fire… I think this is unhelpful in trying to explain realist work – mechanisms exist in the real, as latent powers, liabilities or propensities: contexts are that which influence whether the mechanism becomes operational, but I’m not sure though that contexts ‘cause’ mechanisms to fire – the language here is a bit misleading (although really made me put my thinking cap on!). Also, the idea of ‘given context’ implies that analysis starts with context– however, the outcome comes first, followed by the mechanism, and from that we determine relevant contexts. Mechanism: the response to programme, intervention or process in a particular context in a person operating in that context, leading to a change in behaviour. More accurately, a mechanism is the pre-existing, latent powers, liabilities and propensities which when activated create outcomes. The ‘resources + reasoning = response’ framing of Pawson and Tilley is much suited to programme evaluation which depends on the reasoning or response of individuals: it’s relevance for looking at system level mechanisms is debatable – Gill Westhorp has written about different ways of conceptualising mechanisms, and it might be worth considering how this wider interpretation lends analytic support to the study – by reframing

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	mechanisms in a broader way, can how systems respond be better accounted for? See her chapter Understanding mechanisms in realist evaluation and research in Doing Realist Research (Emmel et al Eds, Sage: London)

VERSION 1 – AUTHOR RESPONSE

Responses to comments from reviewer 1

Number	Section	Comment	Response to reviewer
1	Background	Suggestion the paper would be strengthened by more reference to and consideration of pre-existing formal/substantive theory in this area. Suggestion the mid-range sociological theory of 'candidacy' described by Dixon-Woods et al; the more recent IMPACT (Innovative Models Promoting Access-to-Care Transformation) work by Levesque et al; and Andersen 2004 access framework which specifically looked at contextual factors influencing access for low-income populations:	Thank you for these suggestions - these are all important and useful sources. We did use the IMPACT work by Levesque in the early stages of the work but found that its focus on the individual patient journey did not align with the focus of the analysis at a high level of abstraction which is why we used the Aday and Andersen framework even though it is of an older date. Levesque et al did importantly inform our basic understanding of healthcare access being a process and not a destination where a patient arrives at the door of the service and now access is realised.
2	Background	The 'for whom' question does not appear to have been addressed at all. As you know, populations experiencing homelessness are a heterogenous group – some services may be more acceptable to some people experiencing homelessness than others (e.g. single older white men versus young migrant families). The concepts of 'intersectionality' and 'multiple exclusions' may be worth exploring in this regard, at least in the discussion section.	Your point about intersectionality is important and it is well established that populations experiencing homelessness tend to experience a number of intersecting deprivations, traumas, and barriers from participating fully in society which also impact on their ability to access healthcare. Great suggestion to explore which I have done in the discussion section as you propose. We agree that we don't include an in-depth exploration of the "for whom" part of realist approaches, this was primarily because of a lack of data looking at system factors. We have added a sentence into the limitations section. We focus on the subsection of homeless populations of single adults experiencing long term homelessness and complex needs as we discuss in the background section. The for whom aspect is an area that needs further study and something which we hope to get into more depth with in our realist evaluation of two of the CMOCs in this review which is

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

			currently ongoing and which will have service user in put via focus groups.
3	Method	Second, I feel you need to make the case for doing a review of reviews (plus grey literature). Systematic reviews of reviews are well established as a means of synthesising a broad base of literature, but it is uncommon for realist reviews to use systematic reviews as their main source of data, as this information has already been through a process of interpretation (by someone else and for a different purpose, not necessarily to do with developing and refining theory) and is one step away from the original data. If you explain the rationale for this approach, and reference previous realist reviews of reviews if possible, that would be helpful.	Yes this an important point - thank you! A change has been made to the manuscript to reflect your feedback. Our initial scope of the literature suggested that there was a huge volume of published literature on homelessness and while we were only focusing on health care system factors we felt that the best approach to cover the breadth of literature was to start with review articles. We don't believe this is inconsistent with realist approaches, but rather a more effective way of identifying the key peritnent studies. While the initial search focused on reviews, we did explore primary studies where necessary
4	Method	Review does not start by locating existing theories	Thank you for pointing this out - we have improved the methods section. We did actually use the Levesque et al framework (from their article from 2013 called 'Patient-centred access to health care: conceptualising access at the interface of health systems and populations') when we were developing the initial rough programme theory and we did also use the WHO building blocks in thinking about health system features. It became clear later on that the Aday and Andersen framework was better suited to looking at systems factors than individual factors that promote and impede healthcare access as is the focus of the Levesque framework which is why we used it even thought it is of an older date.
5	Method	you do not provide any information about your initial programme theory, or how it was influenced by your team's theoretical, conceptual, and practical understandings. I think this would be helpful, perhaps as a supplementary file.	Yes good point. We have added more information about the initial programme theory, what it was based on and what it consisted of. We have also added the (very rough) initial programme theory to the supplementary file.
6	Methods	Similarly, examples of your approach to coding could be provided to help the reader follow the logic of your analysis.	Yes good point. Changes have been made in the document to be clearer about the different rounds of coding which took place in the following order: 1. peer-reviewed articles from the systematic search; 2. sources identified through citation tracking from included review articles; 3. grey literature sources.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

7	Results	Suggestion it is not clear how I derived the different contexts, mechanisms and outcomes presented and suggestion to make a clearer link between the stated mechanisms and relevant outcomes.	Yes good point. Thank you! We have added to the descriptions in the texts and also there is now a list of illustrative data examples from which each CMOC was drawn in the updated supplementary file
8	CMOC1	"CMOC1 is labelled “resourcing”, but this includes inadequate training and inadequate funding. You had previously stated that training would not be considered as part of the review, though it is clearly a very important resource for practitioners to develop their knowledge, skills and attitudes to improve care for populations experiencing homelessness. "	Thank you for this feedback - We've improved the clarity between the process of training and exposure to the population group that needs to take place and during which healthcare providers develop the right professional skills, attitude and awareness, and the result of that process. The area of the analysis we decided not to bring forward was the former - delving into the process of training. The latter is key to the analysis we did. We have added to the text in the 'focus of the review' section to make that clearer and hope it does makes sense now!
9	CMOC2	Suggestion to further develop the outcome to provide an explicit link between high staff turn over and continuity of care and therapeutic relationships and to further explain what staff are experiencing in relation to sustainability and stability of services.	Great suggestion - we have added to the text and also there is more data in the new supplementary file which provides exemplar data sources that were used to build the CMOCs.
10	CMOC3	Need for more information for how findings were arrived at and also suggestion further down that "CMOC3 could be divided into scope of goals and degree of fragmentation, with further detail and examples from the data provided for each"	Yes good question. We have joined 'degree of fragmentation' and 'scope of goals' because in this case the goals are partially responsible for creating and sustaining service fragmentation through promoting narrow outcomes which are not achieved through holistic care for a whole person but through targeting specific metrics like lowering blood pressure. See supplementary file for more data.
11	CMOC4	Suggestion that there is a need for more information at how findings were arrived at	There's more info in the new supplementary file and thank you for the feedback
12	CMOC5	Clear but would suggest changing the context to “Leadership that emphasises a culture of inclusivity”	Thank you - good suggestion
13	CMOC6	Need for more information at how findings were arrived at.	There's more info in the new supplementary file and thank you for the feedback
14	Discussion	The concepts of ‘intersectionality’ and ‘multiple exclusions’ may be worth exploring in this regard, at least in the discussion section.	Yes great suggestion. Have added to the discussion.
15	Additional	There are 8 sensible recommendations presented, but it	We have identified which CMOC speaks to each of the

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

		could be made more obvious how these relate to the CMOCs. Perhaps the number of CMOCs should be expanded. For instance, training is mentioned in the recommendations, the conclusion, and the overarching PT, but is not one of the distinct CMOCs.	recommendations. We hope this improves things along with further explanation of the process vs result of training elsewhere (above in number 8)
16	Additional	It would be interesting to check how many of the RAMESES reporting guidelines were met. Perhaps include this in a revision.	We wrote the article in light of the RAMESES guidelines. We have checked and believe that we meet all the quality statements.
17	Additional	Please note that in the appendix there are 25 papers included, not 24.	Great catch! Thanks a million. One had stayed in the appendix from a previous round of analysis but we've removed it now

Responses to comments from reviewer 2

Number	Section	Comment	Response to reviewer
1	Abstract	A combination of induction and deduction were used in analysis, and this needs reflecting on the abstract.	Thank you - good catch! Change made
2	Abstract	The conclusion in the abstract would benefit from explaining more directly how the study informs policy making and implementation by giving a few examples.	Good suggestion. We have made a small change but its tricky within the word limit
3	Article summary/ strengths and limitations	Further limitations of using a 'realist review of reviews' could also be considered: realist reviews can find that there is insufficient information from primary sources about the 'nature of the intervention' (which helps with understanding mechanisms), and so I wonder to what extent a review of reviews suffers further with the included review articles not being explicit about the 'nature of the intervention' and what this might mean for the conclusions and implications?	Thank you - good suggestion. We have added a description of this limitation and the reason for the choice a few different places in the text
4	Background	I think the paragraph about supply and demand side factors needs a bit more analysis in terms of why this impacts on people who experience homelessness, or what the differential/increased negative impact this has on people who experience homelessness. Just needs a bit more to state why this is relevant to this study population.	Good suggestion, thanks - have added to the section
5	Background	There is no definition of what is meant by 'health system', and I think the readers would benefit from understanding what that meant in the context of this study.	Yes that was a shortcoming. Thank you for pointing it out. We used the WHO definition of a health system and have added it in the body of the document

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

6	Background	Adjustment needed for final sentence in paragraph starting “The majority of research exploring access to healthcare…	Yes thank you - the last sentence was not clear and has been changed
7	Background	Suggestion that the summary of realist methodology needs some further elaboration	Thank you - Have made changes.
8	Background	There is also a need for further explanation as to why the review focussed on contexts which shape mechanism action, rather than on mechanisms and their conducive contexts – usually realist work aims to hypothesise generative mechanisms which bring about change, and then through examining a pattern of outcomes determine which outcomes support/inhibit mechanisms working as intended. In this review, it seems the focus is on contexts first, and what mechanisms they may be ‘firing’. Initially, this different emphasis threw me, and I think it needs clearer justification in the paper.	Thank you for this comment. Clearly we did not explain well enough how the analysis took place. We did not focus on contexts and then look for mechanisms. We coded contexts, mechanisms and outcomes at the same time and then in the analysis tried to fit them together according to the literature. we have tried to explain it more clearly in the text and hope that helps.
9	Method	Make the case for review of reviews	Yes this an important point - thank you! A change has been made to the manuscript to reflect your feedback. Our initial scope of the literature suggested that there was a huge volume of published literature on homelessness and while we were only focusing on health care system factors we felt that the best approach to cover the breadth of literature was to start with review articles. We don't believe this is inconsistent with realist approaches, but rather a more effective way of identifying the key pertinent studies. While the initial search focused on reviews, we did explore primary studies where necessary
10	Methods	Justify why realist review was used	Thank you, good point! Changes have been made to Methods section
11	Method	Lack of information about the initial programme theory, how it was influenced by team's theoretical, conceptual, and practical understandings.	Yes good point. We have added more information about the initial programme theory (which was very rough!), what it was based on and what it consisted of. We have also added the initial programme theory, such as it was, to the supplementary file.
12	Methods	Suggestion to provide more information about the searching re: how the IPT was used and inclusion/exclusion criteria	Yes good point - The search has been more fully explained. Also, we should clarify that we did not

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

			use the IPT in searching because was based on limited early reading which did not turn up much in the way of health system features' impact on healthcare access for homeless populations. In the first search then, based on subject librarian advice, we set out to find the literature which covers the intersection of the broad search clusters of 'healthcare access' and 'homeless populations' (eg 'homeless persons' was a search term but 'stigma' wasn't because it was assumed that all relevant articles would come up under the combination of those search clusters). Bringing forward a number of search terms from the IPT might have resulted in many unrelated sources being turned up eg stigma in healthcare access broadly speaking. Pilot searching bore this out.
13	Methods	Question about data extraction - was the IPT used in the data extraction	The initial programme theory indirectly informed the data extraction, but to a less extent because as the review progressed the content of the initial programme theory was superseded.
14	Methods	Suggestion to use more consistent terminology when describing coding.	Yes good point - changes made
15	Methods	Data extraction and analysis: The terminology needs to be more consistent in this section: at the moment, there are inductive codes from the literature, headline categories, initial codes (which aren't explained), and it is a bit confusing to understand what happened with which studies and when.	Good observation - thank you. Changes have been made in the document to be more clear about the different rounds of coding which took place in the following order: 1. peer-reviewed articles from the systematic search; 2. sources identified through citation tracking from included review articles; 3. grey literature sources.
16	Methods	Suggestion to include details of how grey literature/expert references were used in the development of CMOCs	Yes good point - changes made
17	Results	Suggestion that I need to explain what happened with the references which were subsequently added to the review after the systematic search.	Yes important point - changes made
18	Results	Suggestion to have the summary table from the supplementary file of the included studies here in the paper for reference rather than in the supplementary file	I have moved it into the manuscript itself. Hopefully the journal is ok with it!

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

19	Results	The title of the extraction table is a bit misleading: it doesn't look like a data extraction table, as there is no coding of data in it or reference to C,M or Os, and that calling it 'initial search' is confusing as it might imply it was used for the the development of initial programme theory.	Yes thank you, good suggestions. We have changed the name of the table
20	Results	Suggestion that the "paragraph which starts on p9, line 10 needs to tie in more explicitly with the previous parts of the paper which talk about number of included studies and grey literature – at the moment, it looks like this was a 'new' search, which I don't think it was – just need to clarify where the 'grey literature sources' came from – did they come from the original search, or were they purposively searched for after the original search was done?"	Thank you for the suggestion. The grey literature sources came from a new purposive search which was conducted some months after the systematic search of the peer reviewed literature. The Searching section of the article has been updated to clarify.
21	Results	Suggestion to include some examples from studies included in the review to illustrate each of the CMOCs.	Yes good point. Thank you! Illustrative data have been provided in new supplementary file
22	Results	Further, the text reads like a summary, which is useful, however, I think each section could benefit from a bit deeper analysis/ more information and further nuance – did all studies find these things? Which studies didn't? Were there different outcomes of access resulting from different ways of organising services and how were these accounted for? There is a need too for more 'linking phrases' between sentences, such as 'when this happens, included studies showed that it led to …' to really emphasise how the explanations tie together.	Good point. We have added more detail and also supplementary data file will hopefully answer these questions
23	Results	As expected, some of the CMOCs relate to other CMOCs – it would be good to highlight where this is the case, and to comment on what it means for the CMOCs.	Good suggestion. Have made some changes
24	CMOC2	the M isn't quite there – what is it about instability that causes people to move on/not apply for jobs (which are two different outcomes)'	Yes we see your point. We have elaborated in the text and there is more data in the supplementary file
25	CMOC3	"Health system fragmentation and goals: would be interested to know why staff prioritise meeting organisational goals above patient centred care? Also, this is another example of a system- individual response – system output. In terms of line 42, 'staff and providers are not incentivised or empowered…' this sounds like a different CMO, and so it needs to be tied in to the context more	Good point, thank you. Have added to the text and there is more data in the supplementary file

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

		directly? It probably also relates to other CMOCs (talk of 'incentives', so maybe cross over with Resourcing CMOC?) and it would be great to tie it in with them where possible."	
26	CMOC 5	Suggestion to provide a more detailed explanation of how culture assigns value – an example from an included study would be helpful here.	Good point, thank you. Have added to the text and there is more data in the supplementary file
27	CMOC 5	"Where outcomes become mechanisms, some reference needs to be given to the contexts which then enable these new mechanisms to operate: are they the same contexts described earlier, or are there additional contexts which are needed?"	Yes that's a good point, thank you. We have attempted a fuller description in the text.
28	CMOC 6	Suggesting there is a tendency toward listing contexts (in the body text) and that there needs to be more details on how the contexts impact on the mechanisms and use examples from the included studies. Also question of how this CMOC, in the context of flexibility of care and when staff and providers have expertise and experience with the populations group, relates to the first CMOC on inadequate training/lack of expertise? Suggestion to cross reference here between different programme theories. (Minor point: can providers have expertise? They are not conscious entities, so I'd avoid anthropomorphising them.)	Good suggestions here. We have added to the text to more fully explain and the additional data in the supplementary file will also be of help
29	Full programme theory	Suggestion to provide text to describe Figure 9 (the full programme theory) to bring the whole thing together.	Yes good suggestion. We have provided a description
30	Results	"It feels like the CMO Figures are leading the results section a bit too much and yet just cannot capture the complex, nuanced way that the study has learnt about healthcare system access. I wonder if it is truly necessary to keep all the CMO diagrams. If the authors feel it is essential, then I think it would be better to have the description followed by the figure – one can get lost trying to understand a figure if one hasn't been guided through it by the text beforehand."	Thank you for the suggestion. Have moved the figures to the end of the description of each CMOC
31	Results	Suggestion to use the exact same terms in the figures as in the explanatory paragraph(s) below it.	Yes that may have been unclear. We have made that change
32	Results	Suggestion that the figures need to be clear about who a mechanism belongs to (eg staff or patients)	Thank you for the suggestion. We have made those changes
33	Fig 4	needs further clarification: the M isn't quite there – what is it about instability	Thank you for pointing that out - We have added more text and

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

		that causes people to move on/not apply for jobs (which are two different outcomes).	also the supplementary file has more data with helps explain.
34	Fig 5	Is fragmentation the same as silos (in text)?	Yes. Have clarified in text.
35	Fig 6	Need to check against the text to make sure the words in the boxes are the ones in the text.	Yes, done.
36	Fig 7	What are the contexts which enable trust to 'work' as a mechanism?	We have clarified in text
37	Fig 8	"If Needs identified becomes a new context, it needs to be repeated on the left hand side, as at the moment it is only showing as an outcome. Ditto patients feel seen and understood."	We have tried different ways of presenting the data and feel that the way we have it now has the most clarity. I have added to the text as well which should help clarify.
38	Full programme theory - fig 9	"overarching programme theory needs further specificity in terms of which are contexts, mechanisms and outcome and what is the nature of the contexts/mechanisms (some of the categories given are broad), and how do they relate to each other – i.e. what is their configuration? Also, the words used here are not the same as the words used in the preceding CMOCs which would strengthen the Figure."	Thank you for this suggestion. We suspect we have a difference of opinion about how to present a final programme theory. It is not our understanding that it has to be written with the structure of CMOCs. Also, we did not want the overarching programme theory to be a repeat of the CMOCs but wanted it to synthesise the key findings and for that reason it is not structured to explain CMOCs. We have sought to clarify by changing some of the words and also have a fuller explanation in the text. We hope this makes it easier to understand.
39	Discussion	Suggestion to change wording from saying that mechanisms 'arise' to saying that mechanisms are activated.	Thank you - good suggestion and change has been made
40	Discussion - limitations	Studies only include High Income Country healthcare systems, so what is the implication for transferability? To what extent do the contexts in LMI countries differ from those of HI countries, and how might this shape the implications?	Yes good question. The search was not limited to high income countries but the articles that came up were all from such settings. We think it is beyond the scope of this review to comment on to what extent the contexts in LMI countries differ as it wasn't in the literature.
41	Discussion - limitations	Also, impact of using reviews on trying to understand mechanisms (point raised earlier in this peer review).	Absolutely important - change made in document. See item 9 above for further discussion.
42	Discussion - limitations	"Comparisons with existing literature: need to include population group in first sentence to locate the study in the wider literature. "We are aware of no other realist reviews examining this topic in this population and of no other reviews of any approach that have examined high-level health system features that	Yes good suggestion - change made in document

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

		promote healthcare accessibility for homeless people."	
43	Discussion - meaning of the study	the sentence "The first three CMOCs above (CMOC 1-3) were generated almost exclusively from grey literature sources and the next three (CMOC 4-6) were generated primarily from peer reviewed literature" does not seem congruent with the methods section.	Sorry but we are not sure we understand what you mean by it not seeming congruent. Is it to do with the order in which they are presented? The CMOCs presented as the first three in the article were generated later than 4-6 but we do not think it necessary to present findings in the order in which it was analysed.
44	Discussion - comparison with existing literature	The following sentences need some adjusting: As in other realist works, our analysis has uncovered common mechanisms occurring in demi-regular patterns experienced in the specific contexts described in the literature. The mechanisms and outcomes do not always occur in a given context. (p15 lines 56-59) As this is the first mention of demi-regular patterns, I'm not sure it can be claimed that the analysis has uncovered them – also, I'm not sure if this is meant to be common mechanisms or common outcomes (outcomes are more usually associated with demi-regularities – I've not heard it applied to mechanisms before (which doesn't mean to say it can't be done!) In realist analysis, it is the demi-regular, patterned nature of outcomes leads us to consider what mechanisms in which contexts are causing them.	Thanks for that. We have changed the wording and we hope it is clearer now
45	Discussion - meaning of the study	Secondly, I was a bit confused by the sentence that The mechanisms and outcomes do not always occur in a given context. I think this sentence needs a bit more clarification, e.g. is it meant to explain that the review didn't identify all the different mechanisms and outcomes which the contexts that you explored might be triggering?	Thanks for pointing that out. What we attempted to say is that in realist work the claim is not that if you modify a context you will always see a given mechanism fire and led to the given outcome. What you are claiming is that there will be patterns when that happens (or does not happen) with some regularity. We have changed the wording and hope it is clearer now
46	Glossary of terms	Loads of helpful suggestions to make it more precise	Thank you - changes made

VERSION 2 – REVIEW

REVIEWER	Hardwick, Rebecca University of Exeter, Medical School
REVIEW RETURNED	08-Jan-2021

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

GENERAL COMMENTS	Thank you for your response to the my comments, the paper is much improved and I have some more comments to add further strengthen the work. See p5 line 35 - mechanism needs to be plural. Abstract - excellent, no further comments Background - much better. Methods - p6 line 3- ED - abbreviation - needs spelling out. Need to state that it is a realist review of reviews and grey literature - it's still not clear in the first few paragraphs in the methods section that this is a realist review of reviews. It is mentioned in the background section, but it needs reiterating in the methods section - it helps the reader if we are consistent in the language we're using to describe what was done. Was the study protocol (referred to on p6, line 11) published and/or uploaded to PROSPERO, the Centre for Reviews and Dissemination database at the University of York? If so, include reference/web link. Great to include the tentative initial rough programme theory. Could you include the explanation of why it wasn't used to guide searching, as explained in the response to reviewer comments, and could also follow this up in the discussion = what value is there in doing an IPT? (my feeling would be a pragmatic 'you have to start somewhere, even if you realise that that 'somewhere' wasn't the right place to start!) p6 lines 50-53 - would suggest taking out the 'the' before programme theory -at this stage you didn't really have “the” programme theory, so it’s confusing to state that you did - my understanding is that sources were included if it was thought they would help to build programme theory, rather than building 'the' programme theory - is that right? P7, line 12 – I am thinking that if the first lot of coding was done under broad themes from the literature then it was in fact deductive, not inductive. As per previous comments, please check terminology here and amend as necessary. P7 line 22-26 – I am having difficulty with this sentence: “The purpose of the analysis was to identify general patterns which can be expected to occur, according to the data, with some regularity (in realist parlance called ‘demi-regularities’), rather than to be exhaustive.” Demi-regularities are related to whether or not an event happens, and as you know as realists we think that this patterning occurs because of mechanisms firing (or not) given their context. I am not sure how this relates to being exhaustive, so I’d suggest deleting ‘rather than to be exhaustive’. I also think you need to explain what the general patterns are concerned with –what were you looking for? E,g outcomes, events, processes? And add how they are related to the review question? Indeed, I wonder if it is simpler to state that the purpose of analysis was to develop CMOCs and leave out the sentence on demi-regs? Some realist analysis starts by examining the outcome pattern (the demi-regularities of outcomes), and then retroductively figuring out why they are occurring (mechanism) and in what contexts – if this is what was done than I’d state it like that, but if the analysis did not start by identifying the outcome pattern and ‘working backwards’ then I’d suggest something simpler here, or indeed deleting the sentence altogether.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	P8 line 7-8. Regarding PPI – it would be good to add a statement to justify why no PPI was undertaken, as well as reflecting on the implications of this in the limitations section. Overall, the Findings section is much stronger than the previous version – well done on developing the narratives, they are much easier to follow and you have really brought out some good analysis there. Few comments: P12 line54-57. Word missing “because they are in ‘a’ series of continual contract renewals” P12 line 58 ‘services are permanently in a state of flux’ – need to explain a bit more what is meant here – and how it is connected to the programme theory – so fluctuations of what? Also, the use of ‘permanently’ in this sentence feels incorrect – as realists we don’t think that things are ever the same, always, for everyone – nothing is fully permanent. Suggest modifying this part of the sentence to clarify the meaning. P13 line 3-6 – Needs rephrasing so the sentence doesn’t start with ‘because’ and to bring it into one explaining sentence. It is fragmented at the moment– e.g. could start the sentence ‘When staff work for organisations with important missions, they …’ (Also need to clarify what is meant by important missions here.) At the moment this is unconfigured. P13line 39-40 – ‘next step’ – it could be unclear what this means – step towards what? Suggest being more precise with language and meaning here. P13 line 50/51/52 – Great to see an example. Suggest bring the two sentences together into an if/then style statement so that they’re properly configured together: “For example, if as many services as possible are carried out in one clinical encounter and a course of treatment is chosen through shared and transparent decision making, then, responsibility is placed on the service to make itself fit with the patient’s life circumstances and to share knowledge and decision making to promote initial accessibility and beyond.”(25,39,57,59–62,65) Page 14 line 19 – need to state between whom trust develops. Page 14 line 47 – “In the current context” – need to add in a few words as to what this means – i.e. might be clearer to write it as “in the context of flexible healthcare delivery …” P15 line 21-22 – I can appreciate not wanting to list what is in the blue and green boxes, however I think it’s important to include them in the body of the text – these are your consolidated findings and they need to be stated. P15 line 28 – don’t think you need the ‘etc’ at the end of the line there – think it weakens the statement – if there is more to add here add it in, if there isn’t, then just finish with the brackets. P15 line 57 – need to adjust this sentence as the RAMESES standards are publication standards, not quality standards. P16 line 5-6 – regarding international transferability – again I don’t think this can be claimed because the included studies were only of high income countries, with particular kinds of health and welfare systems. I raised this point in the previous review, in terms of transferability and the response was : Yes good question. The search was not limited to high income countries but the articles that came up were all from such settings. We think it is beyond the scope of this review to comment on to what extent the contexts in LMI countries differ as it wasn’t in the literature.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	Whilst I can see that studies from LMICs were not included because none came up, and therefore feel unable to comment this actually points to two things – 1) the review therefore does not know enough about homelessness and healthcare in such countries to make claims about the transferability of findings from HICs to LMICs and 2) the search terms/search was inadequate rather than 'it wasn't in the literature' – i.e. it is not that there is no literature available, but rather that the search did not locate it. So you cannot claim international transferability when studies of LMICs were not included in the review. LMICs are part of the international community are they not? I'm coming down strong on this point because it is a recurring fault to assume that just because something applies in the US, UK and Australia, it applies internationally. It doesn't – the world is bigger than HICs. A quick web search just now has identified a scoping review of health problems and healthcare service utilisation amongst homeless adults in Africa, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7193394/. I have read the abstract and introduction, and would be interested in citation searching it if I had the time, to make the point that healthcare systems are different in LMICs and face different constraints than those countries whose studies were included in the review. For instance, here is quote from the introduction to that paper: "Health systems in most African countries are generally weak, and many have not attained equitable and sustainable access to well-functioning health systems [26].Health services are mostly out-of-pocket and people access services only if they can pay. Few countries operate voluntary national, community-based, or private health insurance schemes [27–29], but most of these insurance schemes require paying a premium and annual renewals before patients can obtain subsidised care which makes the poor and vulnerable people including the homeless forgo using services [30]. Insurance schemes also mostly do not cover all services, and registered patients are sometimes required to pay [31, 32]. Governments and the private sector make efforts to provide services including primary care, emergency services, maternal care, and mental health services. In spite of the progress in improving health outcomes, most African countries still face challenges in providing adequate healthcare services, particularly to the vulnerable. The number, quality, and competency of health care workers as a ratio to the population is low and countries still face higher burden of morbidity and mortality [26]" Reading the above, I can already see that there are contextual factors at the systems level across African countries which are different to Australia, UK and the US. Perhaps a way ahead is noting that the review findings may be transferable to other HICs, that the search did not identify studies from LMICs, and so more research would be needed to explore how the contexts outlined in your study are applicable or not to LMICs, how and for whom? Well done on the redraft – this version is much better and clearer. I look forward to the next iteration.

VERSION 2 – AUTHOR RESPONSE

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) .
Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

21 January 2021

Thank you for your response to the my comments, the paper is much improved and I have some more comments to add further strengthen the work.
Thank you for your ongoing careful and detailed engagement with our paper. We agree it is much improved and the last round of further comments have helped even more.

See p5 line 35 - mechanism needs to be plural.
Thanks for catching that typo!

Abstract - excellent, no further comments
Thank you

Background - much better.
Thank you

Methods - p6 line 3- ED - abbreviation - needs spelling out.
Yes – great catch. Done.

Need to state that it is a realist review of reviews and grey literature - it's still not clear in the first few paragraphs in the methods section that this is a realist review of reviews. It is mentioned in the background section, but it needs reiterating in the methods section - it helps the reader if we are consistent in the language we're using to describe what was done.
Yes good point. We've added further language to the Methods section.

Was the study protocol (referred to on p6, line 11) published and/or uploaded to PROSPERO, the Centre for Reviews and Dissemination database at the University of York? If so, include reference/web link.
It was an internal team protocol that we agreed on at the start of the study and which guided the work. We have clarified in the manuscript.

Great to include the tentative initial rough programme theory. Could you include the explanation of why it wasn't used to guide searching, as explained in the response to reviewer comments, and could also follow this up in the discussion = what value is there in doing an IPT? (my feeling would be a pragmatic 'you have to start somewhere, even if you realise that that 'somewhere' wasn't the right place to start!)
Yes great suggestion. We have added to the manuscript to explain this step more fully.

p6 lines 50-53 - would suggest taking out the 'the' before programme theory -at this stage you didn't really have "the" programme theory, so it's confusing to state that you did - my understanding is that sources were included if it was thought they would help to build programme theory, rather than building 'the' programme theory - is that right?
You're right and that is a good point. That change has been made.

P7, line 12 – I am thinking that if the first lot of coding was done under broad themes from the literature then it was in fact deductive, not inductive. As per previous comments, please check terminology here and amend as necessary.
Codes were created over time as coding took place, document by document. There was no set of a priori codes. Our coding process can best be described as inductive because a set of codes were built up over the course of the process of coding. I think perhaps the problem here is with the use of the term 'broad themes' which might make it seem less granular than it was. Have amended.

P7 line 22-26 – I am having difficulty with this sentence: "The purpose of the analysis was to identify general patterns which can be expected to occur, according to the data, with some regularity (in realist parlance called 'demi-regularities'), rather than to be exhaustive." Demi-regularities are related to whether or not an event happens, and as you know as realists we think that this patterning occurs because of mechanisms firing (or not) given their context. I

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

am not sure how this relates to being exhaustive, so I'd suggest deleting 'rather than to be exhaustive'.
Thank you for the feedback here. Change has been made.

I also think you need to explain what the general patterns are concerned with –what were you looking for? E,g outcomes, events, processes? And add how they are related to the review question? Indeed, I wonder if it is simpler to state that the purpose of analysis was to develop CMOCs and leave out the sentence on demi-regs? Some realist analysis starts by examining the outcome pattern (the demi-regularities of outcomes), and then retroductively figuring out why they are occurring (mechanism) and in what contexts – if this is what was done than I'd state it like that, but if the analysis did not start by identifying the outcome pattern and 'working backwards' then I'd suggest something simpler here, or indeed deleting the sentence altogether.
Thank you for the suggestion. We have added more explanation of our analytical process. We think that introducing the idea of demi-regularities at this stage is helpful for the reader to understand that the claim we are making is not that the analysis showed that the outcomes will always be produced in any of the contexts listed.

P8 line 7-8. Regarding PPI – it would be good to add a statement to justify why no PPI was undertaken, as well as reflecting on the implications of this in the limitations section.
Yes good suggestion. See additional language

Overall, the Findings section is much stronger than the previous version – well done on developing the narratives, they are much easier to follow and you have really brought out some good analysis there.
Few comments:
P12 line54-57. Word missing "because they are in 'a' series of continual contract renewals"
Thank you for catching that! We've made that change.

P12 line 58 'services are permanently in a state of flux' – need to explain a bit more what is meant here – and how it is connected to the programme theory – so fluctuations of what? Also, the use of 'permanently' in this sentence feels incorrect – as realists we don't think that things are ever the same, always, for everyone – nothing is fully permanent. Suggest modifying this part of the sentence to clarify the meaning.
Thank you for pointing out that this wasn't clear. We've modified for more clarity.

P13 line 3-6 – Needs rephrasing so the sentence doesn't start with 'because' and to bring it into one explaining sentence. It is fragmented at the moment– e.g. could start the sentence 'When staff work for organisations with important missions, they …' (Also need to clarify what is meant by important missions here.) At the moment this is unconfigured.
Yes good suggestion. Have made changes to the document

P13line 39-40 – 'next step' – it could be unclear what this means – step towards what? Suggest being more precise with language and meaning here.
Thank you for that suggestion – more precision has been employed.

P13 line 50/51/52 – Great to see an example. Suggest bring the two sentences together into an if/then style statement so that they're properly configured together: "For example, if as many services as possible are carried out in one clinical encounter and a course of treatment is chosen through shared and transparent decision making, then, responsibility is placed on the service to make itself fit with the patient's life circumstances and to share knowledge and decision making to promote initial accessibility and beyond."(25,39,57,59–62,65)
Yes agree – we have made the suggested change.

Page 14 line 19 – need to state between whom trust develops.
Yes – done

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Page 14 line 47 – "In the current context" – need to add in a few words as to what this means – i.e. might be clearer to write it as "in the context of flexible healthcare delivery …"
Yes – done

P15 line 21-22 – I can appreciate not wanting to list what is in the blue and green boxes, however I think it's important to include them in the body of the text – these are your consolidated findings and they need to be stated.
Yes good suggestion – done

P15 line 28 – don't think you need the 'etc' at the end of the line there – think it weakens the statement – if there is more to add here add it in, if there isn't, then just finish with the brackets.
Ok – done

P15 line 57 – need to adjust this sentence as the RAMESES standards are publication standards, not quality standards.
Yes – done

P16 line 5-6 – regarding international transferability – again I don't think this can be claimed because the included studies were only of high income countries, with particular kinds of health and welfare systems. I raised this point in the previous review, in terms of transferability and the response was :
Yes good question. The search was not limited to high income countries but the articles that came up were all from such settings. We think it is beyond the scope of this review to comment on to what extent the contexts in LMI countries differ as it wasn't in the literature. Whilst I can see that studies from LMICs were not included because none came up, and therefore feel unable to comment this actually points to two things – 1) the review therefore does not know enough about homelessness and healthcare in such countries to make claims about the transferability of findings from HICs to LMICs and 2) the search terms/search was inadequate rather than 'it wasn't in the literature' – i.e. it is not that there is no literature available, but rather that the search did not locate it.
So you cannot claim international transferability when studies of LMICs were not included in the review. LMICs are part of the international community are they not? I'm coming down strong on this point because it is a recurring fault to assume that just because something applies in the US, UK and Australia, it applies internationally. It doesn't – the world is bigger than HICs.
A quick web search just now has identified a scoping review of health problems and healthcare service utilisation amongst homeless adults in Africa, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7193394/. I have read the abstract and introduction, and would be interested in citation searching it if I had the time, to make the point that healthcare systems are different in LMICs and face different constraints than those countries whose studies were included in the review.
For instance, here is quote from the introduction to that paper:
"Health systems in most African countries are generally weak, and many have not attained equitable and sustainable access to well-functioning health systems [26].Health services are mostly out-of-pocket and people access services only if they can pay. Few countries operate voluntary national, community-based, or private health insurance schemes [27–29], but most of these insurance schemes require paying a premium and annual renewals before patients can obtain subsidised care which makes the poor and vulnerable people including the homeless forgo using services [30]. Insurance schemes also mostly do not cover all services, and registered patients are sometimes required to pay [31, 32]. Governments and the private sector make efforts to provide services including primary care, emergency services, maternal care, and mental health services. In spite of the progress in improving health outcomes, most African countries still face challenges in providing adequate healthcare services, particularly to the vulnerable. The number, quality, and competency of health care workers as a ratio to the population is low and countries still face higher burden of morbidity and mortality [26]"
Reading the above, I can already see that there are contextual factors at the systems level across African countries which are different to Australia, UK and the US.
Perhaps a way ahead is noting that the review findings may be transferable to other HICs, that the search did not identify studies from LMICs, and so more research would be needed to

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

explore how the contexts outlined in your study are applicable or not to LMICs, how and for whom?
Your point is very well taken. You are absolutely correct and we have made changes to be more precise and to suggest the need for similar work being done for LMICs

Well done on the redraft – this version is much better and clearer. I look forward to the next iteration.

Thank you very much for your close and careful read of now this second draft. We really appreciate all the time and effort you have put into our work. Your comments have helped us make the manuscript much stronger, clearer and more precise. It's been a helpful and encouraging process. We look forward to hearing your feedback on our latest draft.

VERSION 3 – REVIEW

REVIEWER	Hardwick, Rebecca University of Exeter, Medical School
REVIEW RETURNED	02-Mar-2021

GENERAL COMMENTS	Thank you again for the opportunity to read and review this paper. The authors have done a great job, and I only have a few final comments to make. Data extraction and analysis P7 line 26-28 - Almost there on this – the way the sentence is written still reads as though there were a pre-determined set of codes from the literature which data was coded into – i.e. deductive. Sentence reads: Coding was first done inductively under thematic headings of factors that promote and impede healthcare access as described in the literature. Inductive coding is where texts/raw data are read and themes or concepts are developed from them by the researcher, with no a-priori framework. What I think I'm stumbling over is that it states coding was done under thematic headings … as described in the literature, which is why I think it was deductive, and why it seems a contradiction if you say there were no –priori codes, because from reading that, it looks like there were. So perhaps I'm missing something here, but I think this section needs a bit more clarification – could perhaps use your response to this point from the previous peer review: Codes were created over time as coding took place, document by document. There was no set of a priori codes. Our coding process can best be described as inductive because a set of codes were built up over the course of the process of coding. (Also, line 25, stating articles were 'well done' could be given in more formal language.) P7, line 35 – missing 'a' – '… a way to get into the topic…" P7, Close brackets after 'regularities' in line 41. Also, demi-regs are not only a realist term Statement of principle findings – I have read and re-read this a couple of times, and I am thinking it is not as good as the rest of the paper and needs redrafting – the problem is that the authors have spent a lot of time and effort in figuring out how the C, M and Os fit together, only to list them separately here – we have contexts in one sentence and mechanisms in another, all un-configured, despite the hard work put into configuring them! I'd suggest revising this to recap on the findings for the 6 CMOCs, a sentence or two for each, and then a higher level summary statement about what this review has found overall. (Also check

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

	the standard in the RAMESES guidelines for ideas of how to write this bit. Can't recall which standard.) Strengths and limitations – need to reflect briefly on impact, if any, of no PPI. One question I was reflecting on was whether in fact PPI was appropriate considering the review is looking at system level constraints and enablers – rather than individual contextual factors? Really pleased you've made the relevant changes re: generalisability to LMICs, thank you for doing that. Makes the paper stronger to show you've considered it. P16, line 48 – need a paragraph break for 'Much like a majority of…' as you're moving onto a new topic. P16 lines 48-54 – I understand this paragraph, but structure of sentences is a bit clunky – could consider revising – e.g. ending a sentence with 'well' implies the sentence is incorrectly structured, and the final sentence which starts 'Uncovering' sounds unfinished. Final points: Check placing of reference numbers – sometimes they sit outside the end of their sentences, and they need to be inside, before the full stop, without spacing. E.g. p18, line 20, line 26. Also check that reference list is formatted in line with journal requirements and that references are complete – for example: first three authors named and then et al; location included where applicable; and journal titles in italics etc. See https://authors.bmj.com/writing-and-formatting/formatting-your-paper/ P18, line 39 – suggest adding in 'healthcare access for people that experience homelessness from a health systems perspective', otherwise it doesn't fit with the rest of the paragraph (which is about this population of interest). Glossary – apologies, I should have picked this up in the previous review, but I think the definitions of context and mechanisms are still a bit unclear, and also not referenced. The point about considering mechanisms as properties/liabilities is to do with how that may be appropriate for looking at system level features, so the extent to which these then operate on an individual level is a bit confounding and makes the glossary unhelpful. I'd suggest consulting and using the RAMESES training materials definitions for the glossary. Great to see the Illustrative example of included data. Overall, this paper is only in need of very minor changes before it is ready for publication – well done!

VERSION 3 – AUTHOR RESPONSE

Comments to the Author:
Thank you again for the opportunity to read and review this paper. The authors have done a great job, and I only have a few final comments to make.

Thank you very much for your continued engagement with our work and your encouragement. It is helpful and much appreciated.

Data extraction and analysis
P7 line 26-28 - Almost there on this – the way the sentence is written still reads as though

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

there were a pre-determined set of codes from the literature which data was coded into – i.e. deductive. Sentence reads: Coding was first done inductively under thematic headings of factors that promote and impede healthcare access as described in the literature. Inductive coding is where texts/raw data are read and themes or concepts are developed from them by the researcher, with no a-priori framework. What I think I'm stumbling over is that it states coding was done under thematic headings … as described in the literature, which is why I think it was deductive, and why it seems a contradiction if you say there were no –priori codes, because from reading that, it looks like there were. So perhaps I'm missing something here, but I think this section needs a bit more clarification – could perhaps use your response to this point from the previous peer review: Codes were created over time as coding took place, document by document. There was no set of a priori codes. Our coding process can best be described as inductive because a set of codes were built up over the course of the process of coding.

Ok – thank you for letting us know this still isn't clear. We have made another attempt at this.

(Also, line 25, stating articles were 'well done' could be given in more formal language.)

Yes good point! Change has been made.

P7, line 35 – missing 'a' – '… a way to get into the topic…"

Good catch! Thank you

P7, Close brackets after 'regularities' in line 41. Also, demi-regs are not only a realist term

Thank you for catching that. Have added close bracket and have changed the sentence slightly and have provided further explanation of what demi-regularities mean.

Statement of principle findings – I have read and re-read this a couple of times, and I am thinking it is not as good as the rest of the paper and needs redrafting – the problem is that the authors have spent a lot of time and effort in figuring out how the C, M and Os fit together, only to list them separately here – we have contexts in one sentence and mechanisms in another, all un-configured, despite the hard work put into configuring them! I'd suggest revising this to recap on the findings for the 6 CMOCs, a sentence or two for each, and then a higher level summary statement about what this review has found overall. (Also check the standard in the RAMESES guidelines for ideas of how to write this bit. Can't recall which standard.)

Good suggestion – thank you. We were attempting to keep this section short but you've a good point about the lack of configuration. We have rewritten this section accordingly.

Strengths and limitations – need to reflect briefly on impact, if any, of no PPI. One question I was reflecting on was whether in fact PPI was appropriate considering the review is looking at system level constraints and enablers – rather than individual contextual factors?

We have reflected on this and have changed the PPI section accordingly and have added a paragraph to the 'Strengths and Limitations' section. We don't feel that PPI would have added sufficiently to this system-level analysis to warrant the use of time and resources on behalf of potential participants and the research time.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Really pleased you've made the relevant changes re: generalisability to LMICs, thank you for doing that. Makes the paper stronger to show you've considered it.

Thanks again for this suggestion

P16, line 48 – need a paragraph break for 'Much like a majority of…' as you're moving onto a new topic.

You're right – thanks for that! Think that was an editing mistake after accepting changes last go around :)

P16 lines 48-54 – I understand this paragraph, but structure of sentences is a bit clunky – could consider revising – e.g. ending a sentence with 'well' implies the sentence is incorrectly structured, and the final sentence which starts 'Uncovering' sounds unfinished.

Thank you – have made a few changes and we think it reads better now.

Final points:

Check placing of reference numbers – sometimes they sit outside the end of their sentences, and they need to be inside, before the full stop, without spacing. E.g. p18, line 20, line 26.

According to the website you refer to below, the reference number should be right after punctuation which is how we have approached it though we did spot several mistakes which we have corrected! At the link, it says: "Reference numbers in the text should be inserted immediately after punctuation (with no word spacing)—for example,[6] not [6]." Thanks for bringing the inconsistencies to our attention.

Also check that reference list is formatted in line with journal requirements and that references are complete – for example: first three authors named and then et al; location included where applicable; and journal titles in italics etc. See https://authors.bmj.com/writing-and-formatting/formatting-your-paper/

Thank you – have made these changes

P18, line 39 – suggest adding in 'healthcare access for people that experience homelessness from a health systems perspective', otherwise it doesn't fit with the rest of the paragraph (which is about this population of interest).

Yes good suggestion. Thank you.

Glossary – apologies, I should have picked this up in the previous review, but I think the definitions of context and mechanisms are still a bit unclear, and also not referenced. The point about considering mechanisms as properties/liabilities is to do with how that may be appropriate for looking at system level features, so the extent to which these then operate on an individual level is a bit confounding and makes the glossary unhelpful. I'd suggest consulting and using the RAMESES training materials definitions for the glossary.

Thank you – and we agree good suggestion to revisit this. We've made changes accordingly.

Great to see the Illustrative example of included data.

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Overall, this paper is only in need of very minor changes before it is ready for publication – well done!

Thank you and thanks again for your careful engagement with our paper and all your helpful suggestions!

BMJ Open: first published as 10.1136/bmjopen-2020-043091 on 8 April 2021. Downloaded from http://bmjopen.bmj.com/ on June 11, 2025 at Agence Bibliographique de l Enseignement Superieur (ABES) . Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.